

REMARKS

Claim 15 has been amended, and claim 24 has been cancelled. Claims 15-23 and 25-28 are pending, of which claim 15 is an independent claim.

In the Office Action, claim 24 is rejected under 35 U.S.C. § 112, 2nd para. It is respectfully urged that this rejection is no longer applicable due to the cancellation of claim 24.

In the Office Action, claims 15-23 and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forrester et al (US patent No. 6,281,477) in view of Barnett (US patent No. 2,021,458) and further in view of Kochman et al (US patent No. 6,563,094). This rejection is respectfully traversed.

Forrester discloses portable containers for delivering food products, such as pizzas (column 1, lines 14-16). Forrester thus relates to a delivery bag or box for maintaining prepared food products such as a pizza at a desired temperature and moisture content during delivery (see column 1, lines 16-19 and column 5, lines 3-6 and 30-38). The modular heating element incorporated in the bag or box of Forrester aims at reducing the relative humidity within the container and preventing that the temperature decreases too quickly (see column 4, lines 26-35).

Forrester further mentions on column 4, lines 53-57 that the panel material preferably includes interior and exterior fabrics comprising nylon and an insulating fabric comprising polyester, nylon and polyester being artificial materials which are vapour-permeable materials which avoid considerable heat loss (see column 5, lines 39-51).

The present invention as claimed in claim 15 aims at solving a problem which is different from the problem solved by the delivery bag proposed by Forrester. In particular, the present invention relates to "a heater bag for baking products made using a flour-based dough" (see specification on page 1, lines 2-3 and claim 15, first two lines). The aim of the present invention is defined more precisely on page 1, lines 26-37, where it is mentioned that the heater bag according to the invention is designed to be "suitable for use in complete safety

for quickly warming bakery products, while fully conserving the quality and the integrity of these products and simultaneously improving their flavour. Many examples of bakery products are given in the specification (but pizza is not mentioned). The present invention thus aims at processing bakery products which are at room temperature and may be wizened such as stale bread, the processing aiming at heating the bakery products to raise their temperature and improve their flavour.

By contrast, Forrester processes freshly prepared food products just taken out of an oven and being at a relatively high temperature. Forrester thus merely tries to maintain a desired temperature or to slow down the cooling down process during a delivery from a central location to a remote location (see column 9, lines 49-54). Forrester aims at keeping a prepared food product warm during transportation, the temperature being relatively mild. Thus, as mentioned column 10, lines 59-64, Forrester aims at maintaining temperature characteristics at a desirable level over an extended period of time ("For example temperature loss is maintained within a range of between about 0-10°F over a time of up to about 40 minutes").

The person skilled in the art looking for some improvement of the flavour of stale bread or other bakery product, at room temperature, would never be tempted to use a delivery bag such as proposed by Forrester, since Forrester merely tries to limit the cooling process of an already warm food product during transportation, i.e. Forrester discloses a delivery bag which is designed for processing a prepared food product during a long period of time (30-60 minutes) corresponding to a delivery process for trying to keep the integrity of the prepared food product (pizza) as far as possible.

By contrast the present invention may be implemented on the spot, e.g. at home, in a shop, in a restaurant or in a picnic area in a few minutes to restore the integrity of wizened bakery products by heating the products and not just trying to slow down a cooling process.

The features recited in claim 15 are essential to allow a quick and safe heating of bakery products with an inexpensive, lightweight and easily transportable bag, whereas the delivery bag proposed by Forrester would be totally inappropriate for such a use.

Indeed if one considers a pizza delivery bag as taught by Forrester, at least two critical modifications should be made to change the original purpose of such pizza delivery bag and allow heating of bakery products with the required safety for the user.

Firstly claim 15 mentions that for each heater plate the heating power per cm^2 lies in the range 0.13 W to 0.24 W (i.e. an average heating power of 0.18 W/ cm^2). Such a feature, which is not at all taught or suggested by Forrester, is necessary for obtaining a temperature rise which is high enough and quick enough to increase the temperature of the bakery product originally at ambient temperature and obtain in a few minutes bread or a bakery product having a renewed flavour.

Tests have shown that the heating bag according to the present invention may enable to obtain, e.g. for long loaves of French bread, a temperature of about 40°C (104°F) for the crust and even a higher temperature for the crumb at the heart of the bread loaf (see also the present description from page 6, line 29 to page 7, line 11).

A delivery bag as proposed by Forrester is not adapted to obtain such high temperatures starting from ambient temperature, since Forrester merely aims at maintaining or slowing down the cooling process of an already warm prepared food product such as a pizza which may already be initially at 71°C (160°F) or 85°C (185°F) when it is taken out of an oven. Forrester thus does not require power densities within the range defined in claim 15 of the present application and cannot help the person skilled in the art in finding out the optimized power density which will provide the results achieved with the present invention.

Secondly, according to the present invention at least one semi-flexible heater plate having an electrical heater element incorporated therein is put into contact exclusively with a natural material such as cotton, flax or wool, thus avoiding any risk of damage of the bag during heating and also warranting the necessary safety for the user and avoiding any risk of fire, whereas artificial materials such as nylon or polyester which are mentioned by Forrester would systematically fuse or burn at the high temperatures induced by the power density required for a heating process aiming at raising the temperature of the bakery product from the ambient temperature.

It is to be noted that artificial materials such as nylon or polyester would not resist at temperatures required in a heating bag according to the present invention and there is a definite risk that the bag be damaged and/or that a user be burnt when using such bag with artificial material for heating bread.

If the person skilled in the art tries to avoid the above-mentioned drawback by using a bag with artificial materials such as disclosed by Forrester with heating elements having a lower power density (e.g. as defined by Forrester, column 9, lines 32-54), a quick heating of the bakery product is not possible and even after a long period of time (e.g. 10 to 60 minutes) the bakery product is not sufficiently warmed to be substantially modified and have an improved flavour.

The operating conditions for warming bread or other bakery products made using a flour-based dough, in order to restore an initial flavour, are particularly critical and the person skilled in the art would not at all be in a position to define the combination of features of claim 15 from the teaching of Forrester and the general knowledge or even the teaching of Barnett and Kochman without implying an inventive step.

As already stated, Forrester discloses a delivery bag having operating conditions and materials which are not at all suitable for the purpose of the present invention. Also, the Office Action acknowledges that Forrester does not disclose that the pocket in contact with the heater plate is made of natural material comprising cotton, flax and wool.

Barnett discloses an electrical heating pad with an electrical heating element and a woollen bag panel for the purpose of abstracting moisture from the surrounding air and then applying a moist heat to the body of the user of the pad, thus bringing a therapeutic value (see page 1, right hand column, lines 5-24). Barnett also mentions that a moist air is far better for certain physical ailments than a dry heat.

It is respectfully submitted that the human body is completely different from a bakery product. The therapeutic value of an electrical heating pad used by a human being has nothing to do with the process of warming a bakery product to restore its original flavour!

It is not disputed that wool or cotton are well known materials, but Barnett clearly relates to objects which belong to a completely different field of activity than the subject matter of the present invention. Moreover, Barnett mentions on page 2, left-hand column, lines 63-72 and right-hand column, lines 18-21 "the relatively low maximum operating temperature of the heating element 11" and "the thermostat is set to so operate at approximately 125°F, which is below the kindling temperature of the fabrics involved". Such temperature ranges (about 50°C) which may be appropriate for a pad in contact with the human body would not be adapted to a heating bag for bakery products as proposed according to the present invention.

Accordingly, it is quite unlikely that a person skilled in the art aiming at heating stale bread or another bakery product being originally at ambient temperature would combine the teaching of Forrester concerning delivery bags for hot pizzas and the teaching of Barnett concerning pads for human beings.

Finally, Kochman discloses soft and flexible electrical heaters which may be utilized in a great variety of applications. Kochman discloses column 11, lines 6-30 a heating tape with four heating cables having a total power of 330 W. However, Kochman fails to mention which power density would be appropriate for each application (e.g. an electrically heated seat, garments, delivery bags, drum and tank electrical heaters, body/limb warmers, etc.) and in particular which

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specific range of values would be appropriate for the subject matter of the present invention.

Accordingly, the ranges of values mentioned in claims 15 and 16 are not defined by Kochman nor are they defined by Forrester or Barnett and the reasoning on page 4 of the Office Action is typically an ex post facto analysis which can only be made once the solution is known.

As a conclusion the subject matter of claim 15 is clearly non obvious for a person skilled in the art since Forrester, Barnett and Kochman taken alone or in combination fail to clearly teach the complete combination of features recited in claim 15.

Claims 16-23 and 25-28 are all dependent claims which therefore include all limitations of claim 15. Accordingly, claims 16-23 and 25-28 should also be deemed allowable.

Respectfully submitted,

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